

showed no favorable reaction. These investigators consider their results sufficiently satisfactory to warrant a continuation of their former prophylactic procedures.

Rush² of the Department of Public Health and Hygiene of the University of Kentucky worked with a small group of fifty-six persons, practically all of whom showed definite pathology of the nose, and about half of whom had demonstrable trouble in the throat. In spite of these apparent handicaps, almost half of the group showed beneficial results from the inoculation; about one-third showed a doubtful report, and about one-fifth a negative reaction.

No brief is held for or against non-specific prophylaxis. Colds are a problem of sufficient moment. Any reasonable procedure which gives hope of prevention or mitigation should receive serious consideration. It is of interest that a large mercantile group in central California is expecting to use a vaccine as a preventive measure during the present autumn.

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REFERENCES

1. Repplier, S. J., and Leaman, W. G.: The Use of a Stock Vaccine in the Preventive Treatment of Colds: A Report of One Hundred and Twenty-Five Cases, *Jour. Indust. Hyg.*, 9:85, 1927.
2. Rush, J. E.: Combating Upper Respiratory Tract Infections with Cold Vaccine, *The Nation's Health*, 9:18, February, 1927.

Surgery

The Treatment of Head Injuries.—With the advent of the automobile and the progressing complexity of modern industry, there is a corresponding increase in the number of accidents, often resulting in more or less serious injury to the head. Perhaps in no other type of case is the wise and energetic action on the part of the physician so important for the ultimate good of the patient. It is the object of this contribution to review the essential points in the treatment of traumatism of the head.

When shock is present, treatment favoring the proper reaction of the patient is first demanded. Such common measures as a hot blanket, judicious use of hot-water bottles, and elevation of the foot of the bed, together with the use of stimulants, are indicated. Hot coffee by rectum is of great value if caffeine, adrenalin, or pituitrin are not at hand for hypodermic administration.

Treatment of any wound of the superficial tissues of the head should follow. The simple abrasion or "brush burn" of the skin may be cared for by the application of a suitable antiseptic after cleansing of the area with soap and water. Areas surrounding cuts in the scalp should be shaved, the wound cleansed, antiseptized, and closed with interrupted sutures, drains being used if the subaponeurotic space has been invaded. Wounds of the head should be dressed daily, so that any sign of infection can be detected. In all cases with open wounds the use of tetanus antitoxin is advised.

Unconsciousness of short duration is significant of a temporary derangement of the functions of

the brain (concussion) and no special treatment is necessary. Prolonged unconsciousness is suggestive of contusion, compression, or laceration of the brain with an attendant edema of its substance.

Dehydration of the brain may be accomplished by the use of hypertonic solutions by vein or by rectum. Glucose solution (50 per cent) intravenously in 15 to 30 cc. doses, or the administration of 50 per cent solution of magnesium sulphate in doses of 2 to 6 ounces by rectum (as a retention enema) are probably the most accessible in emergency. These procedures should be repeated at intervals of four to six hours until consciousness is regained. If the period of coma is prolonged over twenty-four hours, acidosis should be combated by the use of a rectal drip of 2 per cent soda and 5 per cent glucose solution. Routine testing for acetone in the urine will assist in preventing this condition.

Spinal puncture is of a diagnostic and therapeutic value. It indicates the rise of intracranial pressure and the extent of vascular damage. Therapeutically the removal of the fluid temporarily reduces pressure and relieves the cortex of the irritation of free blood.

Infection of the intracranial tissues originates in implanted contaminated material or through a traumatic opening or diploic vein. Where there is danger of infection follow the suggestion of Crowe to administer 15 grams of hexamethylin tetramin (urotropin) four times a day. This renders the cerebrospinal fluid slightly antiseptic and may help prevent intracranial suppuration.

Experience has shown that the conservative method in fractures of the skull is of greater value in lowering the mortality than early recourse to surgery. Decompression should be limited to those cases which show hemiparesis with spasticity immediately or which develop hemiparesis and unconsciousness after a lucid interval. A subtemporal craniotomy and opening of the dura should be done on the contralateral side to evacuate the blood-clot and to secure the bleeding point. Depressed fractures, especially in adults, call for operative interference with elevation of the fragments. It is unnecessary to add that any surgical measures will be most successful in the hands of the neurosurgeon.

Prolonged rest is of great importance in the after-care of head injury cases. If faithfully carried out, it will do much to avoid the unpleasant sequelae of headaches, vertigo, tinnitus, and symptoms of nervous imbalance. The patient cannot always be convinced of its value, but the physician has not discharged his duty until he has emphasized the importance of such a program.

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Coronado Meeting Reservations.—The tented city adjacent to Hotel del Coronado in the south, and facing the ocean boulevard will also be opened for the annual meeting. Cottages similar to those at Yosemite Lodge may be secured. Many members doubtless will prefer the seclusion and quiet of these detached cottages to rooms in the main hotel. Each cottage has automobile parking space, and porch space.